

What is claimed is:

*S.S B, 1* 1        1. A digital camera comprising:  
2                    a removable nonvolatile memory;  
3                    picture-taking means for storing picture information in said  
4                    memory;

5                    picture selecting means for selecting a picture; and  
6                    processing control information storage means for storing a  
7                    processing method for said selected picture in said memory means.

1                    2. The digital camera according to claim 1 wherein said picture  
2                    selecting means is for selecting said picture to be printed, and said processing  
3                    control information storage means stores information relating to control of  
4                    printing of said picture.

5                    3. The digital camera according to claim 1 wherein said picture  
6                    selecting means is for selecting said picture to be displayed, and said processing  
7                    control information storage means stores information relating to control of  
8                    displaying of said picture.

9                    4. The digital camera according to claim 1 wherein said picture  
10                  selecting means is for selecting said picture to be transmitted, and said  
11                  processing control information storage means stores information relating to  
12                  transmission of said picture.

13                  5. The digital camera according to claim 1 wherein said  
14                  processing control information storage means stores a processing instruction

15 string for said selected picture.

16 *Sub a 17* 6. The digital camera according to claim 2 wherein said picture  
17 selecting means is for selecting a picture corresponding to an order person, and  
18 said print control information storage means stores information corresponding  
19 to said picture.

20 *Sub a 17* 7. The digital camera according to claim 2 or 6 wherein said  
21 processing control information means stores information about a rotation angle  
22 of a picture also. 2

23 *Sub a 17* 8. The digital camera according to claim 3 wherein said  
24 processing control information storage means stores information about a  
25 rotation angle of said picture.

26 *Sub a 17* 9. The digital camera according to claim 4 wherein said  
27 processing control information storage means stores information about a  
28 rotation angle of said picture.

29 10. A printer unit comprising:

30 a removable nonvolatile memory;

31 multi-print means for printing picture information stored in said  
32 memory;

33 print control information obtaining means for obtaining print  
34 control information relating to at least processing of information to be printed  
35 and a rotation angle of a picture stored in said memory;

36 print order adjusting means for adjusting a print order so as to

37 include picture information of the same rotation angle for a plurality of  
38 pictures; and

39 print control means for specifying a print order to the multi-print  
40 means.

1 *Sub a 27* 11. A printer unit comprising:

2 a removable nonvolatile memory;

3 print means for printing picture information stored in said  
4 memory;

5 print control information obtaining means for obtaining  
6 information about a picture to be printed and a print order person stored in said  
7 memory;

8 print order adjusting means for determining a print order  
9 according to said print control information;

10 frame specifying means for selectively instructing the print  
11 control means to input a different color, a different shape or a frame line  
12 having a different; and

13 print control means for specifying a print order and a frame color  
14 to the print means.

1 *Sub a 27* 12. A printer unit according to claim 11 wherein said print control  
2 information obtaining means obtains print control information corresponding to  
3 the order person, said printer unit further comprising:

4 order person list forming means for instructing the print control

5 information to be printed using a frame line specified by the frame specifying  
6 means.

1 *Sub a 2)* 13. A printer unit according to claim 11 further comprising: a  
2 marking specifying means for instructing the print control means to enter a  
3 different mark into a print result if the print order person asks to print a  
4 different picture,

5 wherein said print control means specifies a print order and mark  
6 to the print means.

1 14. A printer unit according to claim 13 wherein said print control  
2 information obtaining means obtains print control information corresponding to  
3 the order person, said printer unit further comprising:

4 an order person list forming means for instructing printing of a  
5 picture corresponding to the order person using a mark specified by the  
6 marking specifying means.

1 15. A printer unit according to claim 11, 12, 13 or 14 wherein  
2 said print control information obtaining means obtains print control information  
3 about a picture to be printed and a rotation angle of the picture and said print  
4 order adjusting means regards pictures having the same rotation angle as the  
5 same group and adjusts and determines a print order so that picture information  
6 of a different group is not printed together on a single paper.

1 16. A picture processing unit comprising:

2 a removable nonvolatile memory;

3 processing means for performing one of printing, displaying and

4 transmission according to picture information stored in said memory;

5 processing control information obtaining means for obtaining

6 processing control information relating to said picture to be one of printed,

7 displayed and transmitted from said memory; and

8 processing control means for instructing said processing means to

9 one of print, display and transmit said picture.

1 *Sub a 37* 17. A picture printer unit according to claim 16 wherein

2 said processing means is for printing said picture information;

3 said processing control information obtaining means obtains print

4 control information relating to said picture to be printed from said memory; and

5 said processing control means is for specifying a print order for

6 said processing means.

1 *Sub a 37* 18. A picture display unit according to claim 16 wherein

2 said processing means is for displaying display picture

3 information according to picture information stored in said memory;

4 said processing control information obtaining means is for

5 obtaining display control information relating to said picture to be displayed

6 from said memory; and

7 said processing control means is for specifying a display order for

8 said processing means.

1 *Sub a 37* 19. A picture transmission unit according to claim 16 wherein

2           said processing means is for transmitting display picture  
3 information according to said picture information stored in said memory;

4           said processing control information obtaining means is for  
5 obtaining transmission control information relating to said picture to be  
6 transmitted from said memory; and

7           said processing control means is for specifying a transmission  
8 order for said processing means.

1           20. A picture viewing unit comprising:

2           a removable nonvolatile memory;

3           picture selecting means for selecting a picture to be subjected to at  
4 least one of print, display, transmission and a special treatment in said memory;  
5 and

6           control information storage means for storing information relating  
7 to at least one of printing, displaying, transmitting and a special treatment of  
8 said selected picture in said memory.

1           21. A picture print system comprising a digital camera and a  
2 printer unit for use with a removable nonvolatile memory, said digital camera  
3 comprising:

4           picture-taking means for storing picture information in said  
5 memory;

6           picture selecting means for selecting a picture; and

7           processing control information storage means for storing a

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8 processing method for said selected picture in said memory,

9 said printer unit comprising:

10 multi-print means for printing picture information stored in said  
11 memory;

12 print control information obtaining means for obtaining print  
13 control information relating to at least processing of information to be printed  
14 and a rotation angle of a picture stored in said memory;

15 print order adjusting means for adjusting a print order so as to  
16 include picture information of the same rotation angle for a plurality of  
17 pictures; and

18 print control means for specifying a print order to the multi-print  
19 means.

1 ~~22.~~ A picture display system comprising a digital camera and a  
2 picture display unit for use with a removable nonvolatile memory, said digital  
3 camera comprising:

4 picture-taking means for storing picture information in said  
5 memory;

6 picture selecting means for selecting a picture; and

7 processing control information storage means for storing a  
8 processing method for said selected picture in said memory,

9 said picture display unit comprising:

10 processing means for performing displaying according to picture  
11 information stored in said memory;

12 processing control information obtaining means for obtaining  
13 display control information relating to said picture to be displayed from said  
14 memory; and

15 processing control means for instructing said processing means to  
16 display said picture.

4 picture-taking means for storing picture information in said  
5 memory;

6 picture selecting means for selecting a picture; and

7 processing control information storage means for storing a  
8 processing method for said selected picture in said memory,

9 and said picture transmission unit comprising:

10 processing means for performing transmission according to  
11 picture information stored in said memory;

12 processing control information obtaining means for obtaining  
13 transmission control information relating to said picture to be transmitted from  
14 said memory; and

15 processing control means for instructing said processing means to

16 transmit said picture.

1 24. A picture viewing system comprising a digital camera and a  
2 picture viewing unit for use with a removable nonvolatile memory,

3 said digital camera comprising:

4 picture-taking means for storing picture information in said  
5 memory;

6 picture selecting means for selecting a picture; and

7 processing control information storage means for storing a  
8 processing method for said selected picture in said memory,

9 and said picture viewing unit comprising:

10 picture selecting means for selecting a picture to be subjected to at  
11 least one of print, display, transmission and a special treatment in said memory;  
12 and

13 control information storage means for storing information relating  
14 to at least one of printing, displaying, transmitting and a special treatment of  
15 said selected picture in said memory.

1 Sub a 47 25. A printer unit comprising:

2 a connector for connecting a memory storing pictures;

3 card control means for controlling said memory through said  
4 connector;

5           file control means for reading a file in said memory;

6           picture conversion means for converting the file read by said file

7           control means to a predetermined picture data type;

8           picture processing means for converting the picture data obtained

9           by said conversion to a printable data type;

10          print control means for inputting the data obtained by said picture

11          processing; and

12          print control means for determining one or more pictures to be

13          printed in a predetermined procedure and instructing at least said file control

14          means.

1           26. A printer unit according to claim 25 wherein

2           said memory has print control information stored at a

3           predetermined position;

4           said print control means reads said print control information using

5           said file control means and if said print control information exists, determines

6           one or more pictures to be printed according to said print control information.

1           27. A printer unit according to claim 25 further comprising:

2           a frame memory for displaying a picture on a monitor; and

3           file retrieval means for retrieving a file having a predetermined

4           format stored in said memory,

5           wherein said print control means retrieves said file in a

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6 predetermined order from a predetermined position of said memory, reads the  
7 retrieved file, converts the file to picture data, stores the converted data in said  
8 frame memory and displays on a monitor,

9                   said printer unit printing a picture selected by a user from the  
10    displayed pictures.

1 28. A printer unit according to claim 25 further comprising:

2 a frame memory for displaying a picture on a monitor;

3 file retrieval means for retrieving a picture file having a  
4 predetermined format stored in said memory,

5 said picture conversion means having for converting picture data  
6 to reduced picture data,

7                   said print control means retrieving said picture file in a  
8 predetermined order from a position of said memory , reading the retrieved  
9 picture file, storing the reduced picture data repeatedly and displaying multiple  
10 reduced pictures,

11                   said printer unit printing one or more pictures selected by a user  
12   from said multiple pictures.

1                   29. A printer unit according to claim 27 wherein said file retrieval  
2 means retrieves all files having a predetermined format in said memory by  
3 starting retrieval from a predetermined file path in said memory.

1 *Sub a 57* 30. A printer unit according to claim 26 wherein said file retrieval  
2 means retrieves all files having a predetermined format in said memory having

3 by starting retrieval from a predetermined file path.

1           31. A printer unit according to claim 25-30 wherein said picture  
2 conversion means comprises: means for analyzing a beginning portion of a  
3 picture file read from said memory to extract numbers of horizontal and  
4 vertical picture elements and a predetermined parameter corresponding to  
5 expansion of a compressed picture; means for enlarging the compressed picture  
6 to a bit image picture using said parameter; and magnification means for  
7 enlarging and reducing the enlarged bit image picture.

1           32. A printer unit according to claim 25-30 further comprising:

2           video signal processing means for processing an analog video  
3 signal so as to carry out writing into the frame memory and display of the  
4 processed data,

5           said printer unit capturing said analog video signal processed by  
6 said video signal processing means in said frame memory and writing the  
7 picture captured in the frame memory into said memory.

1           33. A printer unit according to claim 31 further comprising:

2           video signal processing means for processing an analog video  
3 signal so as to carry out writing into the frame memory and display of the  
4 processed data,

5           said printer unit capturing said analog video signal processed by  
6 said video signal processing means in said frame memory and writing the  
7 picture captured in the frame memory into said memory.

A<sub>1</sub> & C<sub>3</sub> >  
A<sub>2</sub> & F<sub>2</sub> >

A<sub>1</sub> &  
D<sub>1</sub> &